Service Manual

Label Printer

EOS

Service Manual

for the following products

Description	Type
Label Printer	EOS1 / 200
	EOS1 / 300
	EOS1 / 200 C
	EOS1 / 300 C
	EOS4 / 200
	EOS4 / 300
	EOS4 / 200 C
	EOS4 / 300 C

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Topicality

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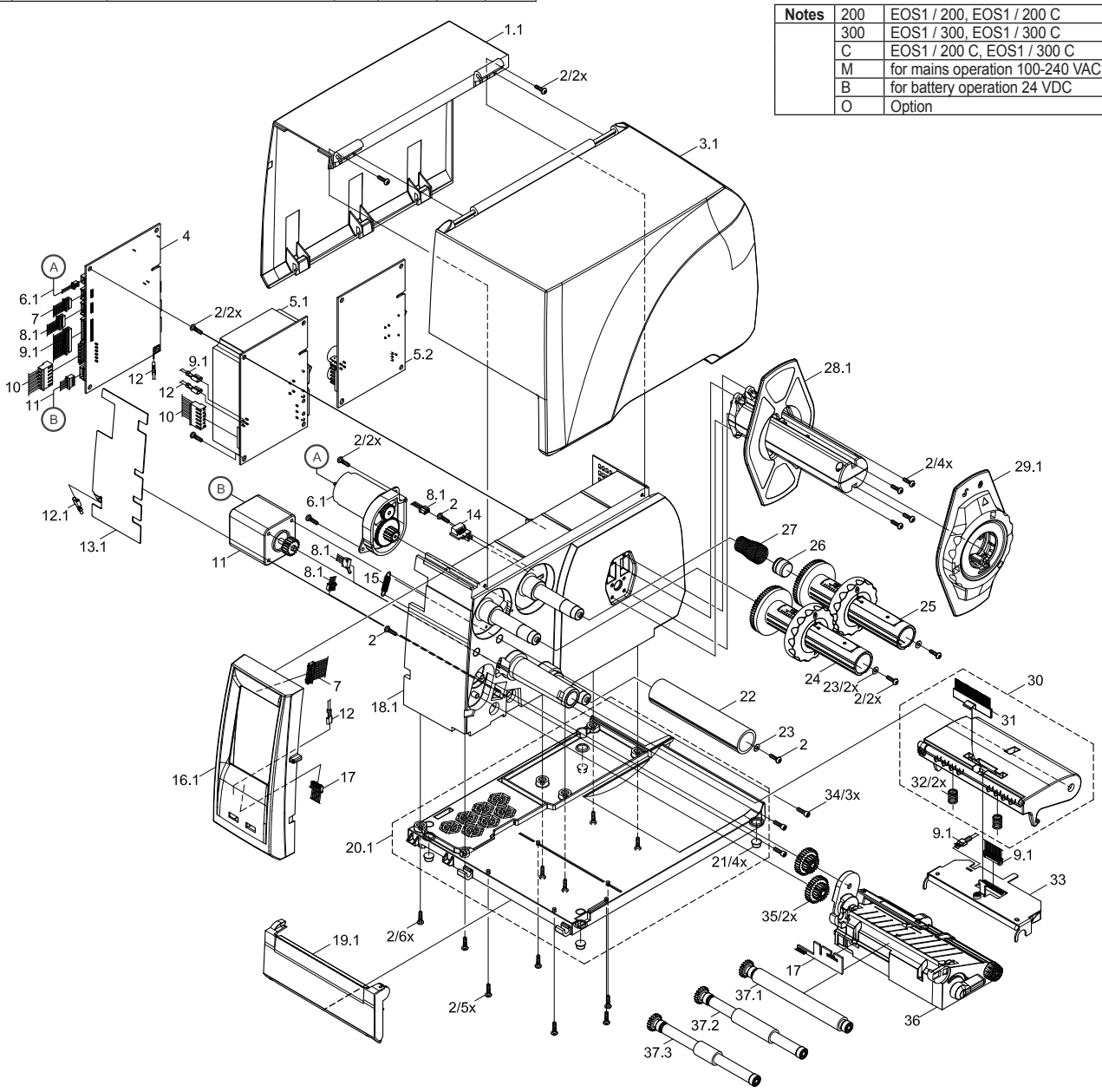
Spare Parts - EOS1 Print Mechanics

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
1.1	5965403.001	Cover Plate	1			
2	5902414.001	Screw EJOT-PT-K30x12	10			
3.1	5965484.001	Cover	1			
4	5550176.001	CPU X3	1			
5.1	5551126.001	Power Supply	1	M		
5.2	5966366.001	DC/DC Converter	1	B		
6.1	5965498.001	Gear Motor	1			
7	5965471.001	Cable Control Panel	1			
8.1	5965474.001	Cable Sensors	1			
9.1	5965473.001	Cable Printhead	1			
10	5965530.001	Cable Power Supply	1			
11	5965465.001	Stepper Motor	1			
12.1	5965534.001	Cable Ground Connection	1			8963
12.3	5965384.001	Cable Ground Connection	1		8964	
13.1	5965566.001	Shielding Plate	1			8963
14	5965359.001	Sensor	1			
15	5966209.001	Spring	1			
16.1	5965510.001	Control Panel	1			
17	5965378.001	Cable Cutter Connection	1	C		
18.1	5965435.001	Chassis	1			
19.1	5965445.001	Tear-off Plate	1			
20.1	5966207.001	Baseplate	1			

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
21	5906193.001	Stopper	10			
22	5965477.001	Belt Roller	1			
23	5903004.001	Washer DIN125-A3.2	10			
24	5966203.001	Ribbon Take-up Hub	1			
25	5966205.001	Ribbon Supply Hub	1			
26	5966214.001	Bushing	1			
27	5965427.001	Spring	1			
28.1	5965455.001	Media Hub	1			
29.1	5965460.001	Margin Stop	1			
30	5966354.001	Printhead Holder	1			
31	5966323.001	Antistatic Brush	1			
32	5906104.001	Spring	10			
33.1	5966096.001	Printhead 200	1	200		
33.2	5965580.001	Printhead 300	1	300		
34	5902867.001	Screw DIN7984-M3x8	10			
35	5965536.001	Gear Wheel Z31/19	1			
36	5965415.001	Transport Module	1			
37.1	5965488.001	Print Roller DR4	1			
37.2	5966219.001	Print Roller DR4-50	1	O		
37.3	5966218.001	Print Roller DR4-25	1	O		
-	9109223.001	Packaging	1			

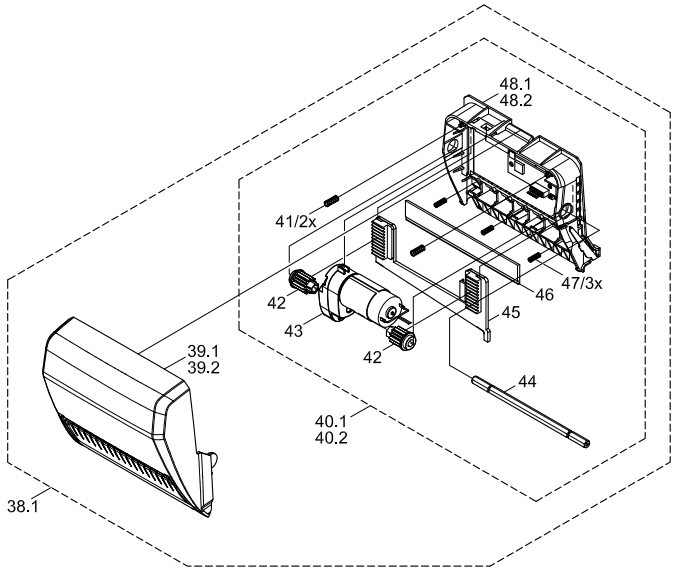
Notes		
	200	EOS1 / 200, EOS1 / 200 C
	300	EOS1 / 300, EOS1 / 300 C
	C	EOS1 / 200 C, EOS1 / 300 C
	M	for mains operation 100-240 VAC
	B	for battery operation 24 VDC
	O	Option



Spare Parts - Cutter EOS1 C

No.	Part No.	Description	PU	Notes	Serial No. Cutter	
					from	to
38.1	5965520.001	Cutter EOS1 C	1			
39.1	5965987.001	Cover	1			917
39.2	5966331.001	Cover	1		918	
40.1	5965529.001	Cutter Module	1			917
40.2	5966350.001	Cutter Module	1		918	
41	5540637.001	Spring	1			
42	5965501.001	Gear Wheel Z12	1			

No.	Part No.	Description	PU	Notes	Serial No. Cutter	
					from	to
43	5541379.001	Gear Motor	1			
44	5965502.001	Shaft	1			
45	5965524.001	Blade	1			
46	5965528.001	Blade	1			
47	5906221.001	Spring	1			
48.1	5965507.001	Chassis	1			917
48.2	5966912.001	Chassis	1		918	

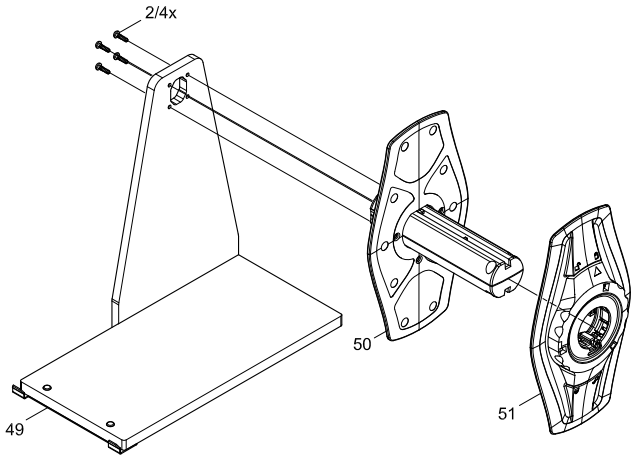


Note!
To upgrade the EOS1 with the Cutter EOS1 C to an EOS1 / 200 C or EOS1 / 300 C the Cable Cutter Connection (Art. No.: 5965378.001) must also be ordered .

Spare Parts - External Unwinder EOS1/205

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
2	5902414.001	Screw EJOT-PT-K30x12	10			
49	5965349.001	Holder	1			

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
50	5965504.001	Media Hub	1			
51	5959588.001	Margin Stop	1			

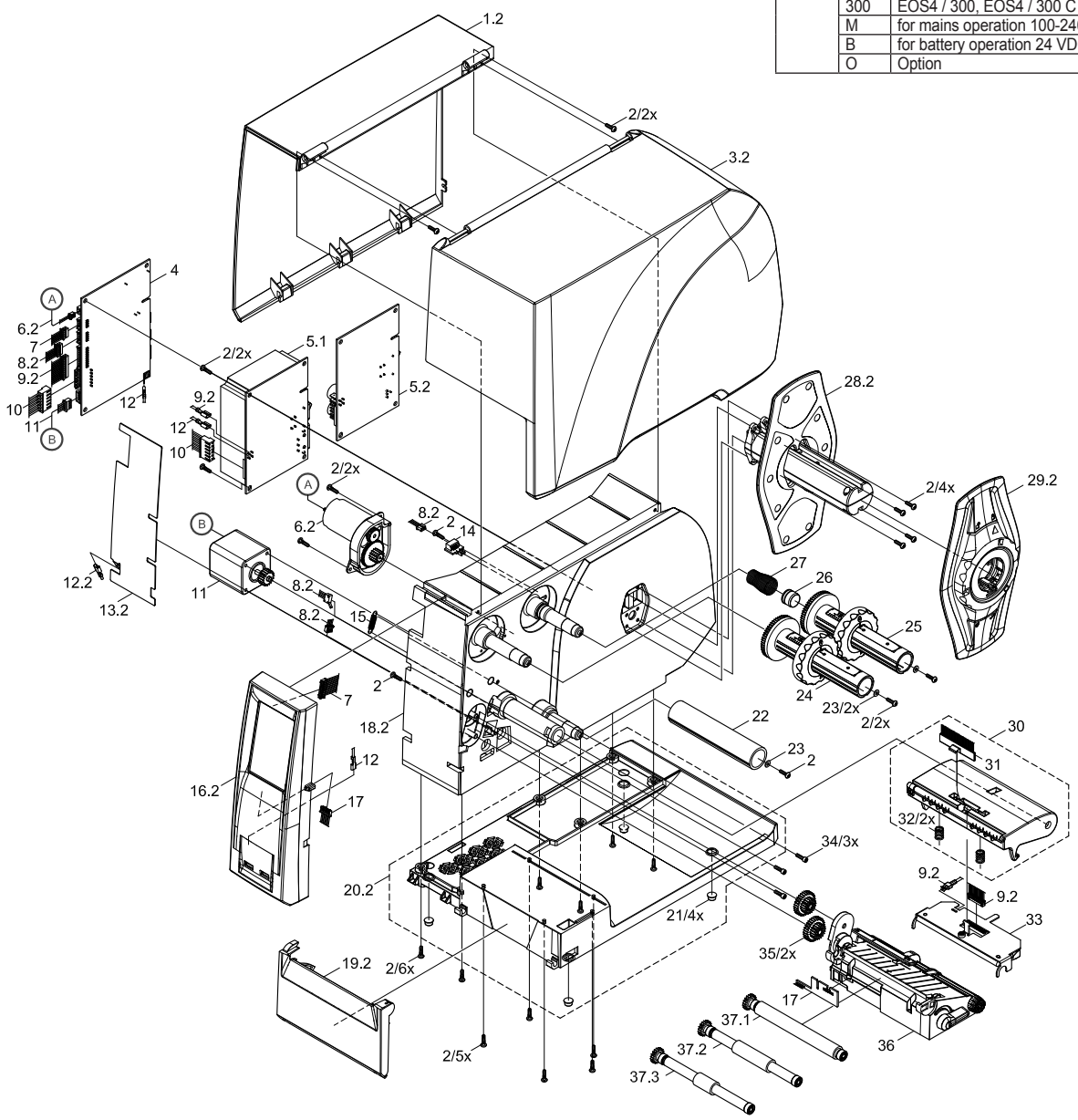


Spare Parts - EOS4 Print Mechanics

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
1.2	5965872.001	Cover Plate	1			
2	5902414.001	Screw EJOT-PT-K30x12	10			
3.2	5965877.001	Cover	1			
4	5550176.001	CPU X3	1			
5.1	5551126.001	Power Supply	1	M		
5.2	5966366.001	DC/DC Converter	1	B		
6.2	5965887.001	Gear Motor	1			
7	5965471.001	Cable Control Panel	1			
8.2	5965388.001	Cable Sensors	1			
9.2	5965387.001	Cable Printhead	1			
10	5965530.001	Cable Power Supply	1			
11	5965465.001	Stepper Motor	1			
12.2	5965392.001	Cable Ground Connection	1			8963
12.3	5965384.001	Cable Ground Connection	1		8964	
13.2	5965857.001	Shielding Plate	1			8963
14	5965359.001	Sensor	1			
15	5966209.001	Spring	1			
16.2	5965880.001	Control Panel	1			
17	5965378.001	Cable Cutter Connection	1			
18.2	5965878.001	Chassis	1			
19.2	5965879.001	Tear-off Plate	1			
20.2	5965882.001	Baseplate	1			

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
21	5906193.001	Stopper	10			
22	5965477.001	Belt Roller	1			
23	5903004.001	Washer DIN125-A3.2	10			
24	5966203.001	Ribbon Take-up Hub	1			
25	5966205.001	Ribbon Supply Hub	1			
26	5966214.001	Bushing	1			
27	5965427.001	Spring	1			
28.2	5965886.001	Media Hub	1			
29.2	5965885.001	Margin Stop	1			
30	5966354.001	Printhead Holder	1			
31	5966323.001	Antistatic Brush	1			
32	5906104.001	Spring	10			
33.1	5966096.001	Printhead 200	1	200		
33.2	5965580.001	Printhead 300	1	300		
34	5902867.001	Screw DIN7984-M3x8	10			
35	5965536.001	Gear Wheel Z31/19	1			
36	5965415.001	Transport Module	1			
37.1	5965488.001	Print Roller DR4	1			
37.2	5966219.001	Print Roller DR4-50	1	O		
37.3	5966218.001	Print Roller DR4-25	1	O		
-	9109233.001	Packaging	1			

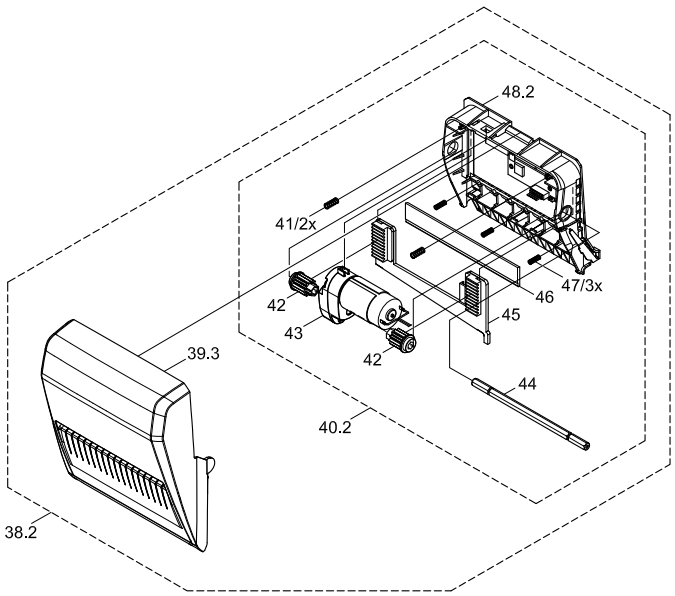
Notes		
	200	EOS4 / 200, EOS4 / 200 C
	300	EOS4 / 300, EOS4 / 300 C
	M	for mains operation 100-240 VAC
	B	for battery operation 24 VDC
	O	Option

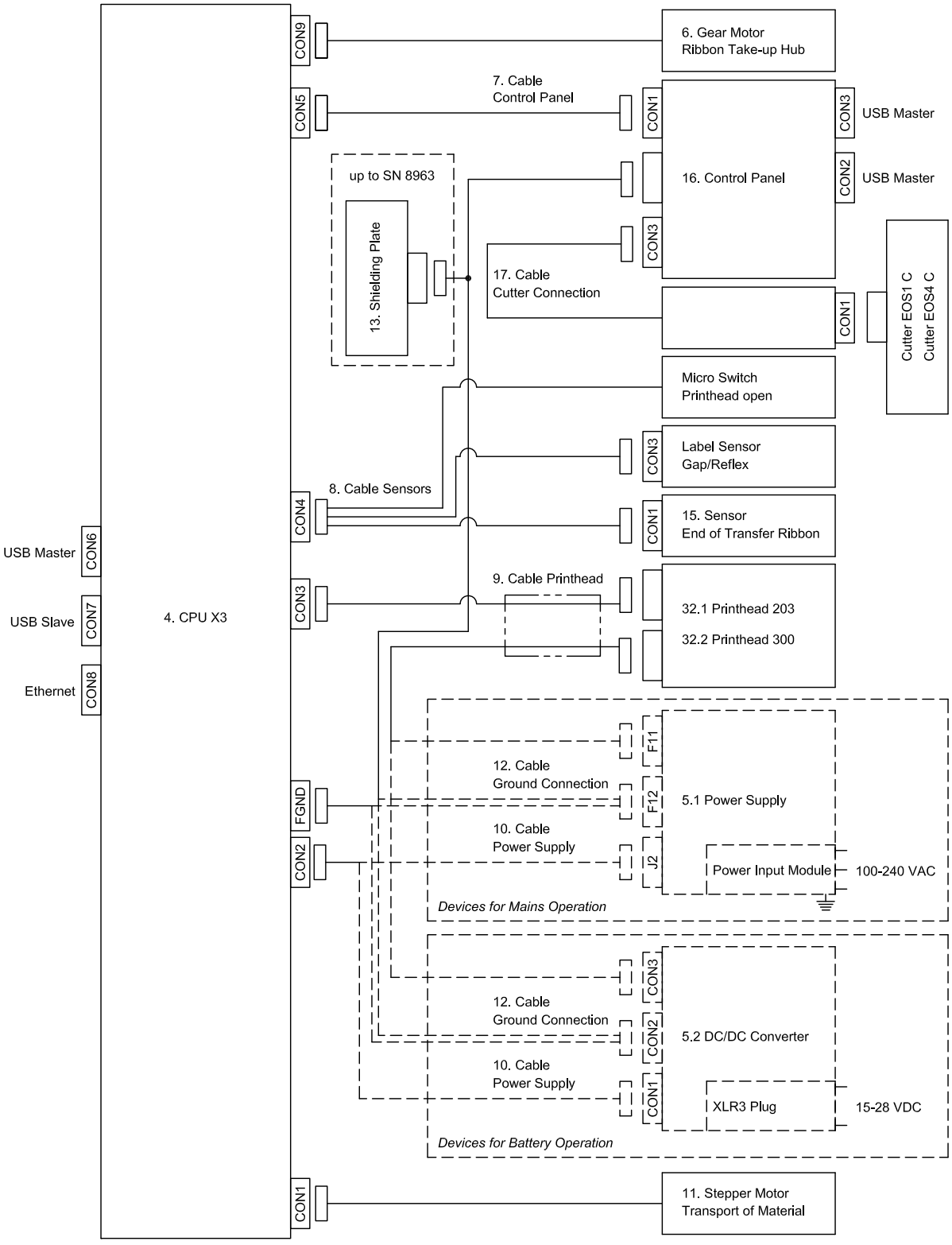


Spare Parts - Cutter EOS4 C

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
38.2	5966730.001	Cutter EOS4 C	1			
39.3	5966341.001	Cover	1			
40.2	5966350.001	Cutter Module	1			
41	5540637.001	Spring	1			
42	5965501.001	Gear Wheel Z12	1			
43	5541379.001	Gear Motor	1			

No.	Part No.	Description	PU	Notes	Serial No.	
					from	to
44	5965502.001	Shaft	1			
45	5965524.001	Blade	1			
46	5965528.001	Blade	1			
47	5906221.001	Spring	1			
48.2	5966912.001	Chassis	1			




4. CPU X3
CON9
CON5
CON4
CON3
CON2
CON1
FGND
6. Gear Motor
Ribbon Take-up Hub
7. Cable
Control Panel
CON1
CON3
CON2
CON3
USB Master
USB Master
16. Control Panel
up to SN 8963
13. Shielding Plate
17. Cable
Cutter Connection
CON1
Cutter EOS1 C
Cutter EOS4 C
Micro Switch
Printhead open
CON3
Label Sensor
Gap/Reflex
8. Cable Sensors
CON1
15. Sensor
End of Transfer Ribbon
9. Cable Printhead
32.1 Printhead 203
32.2 Printhead 300
USB Master
CON6
USB Slave
CON7
Ethernet
CON8
F11
F12
J2
12. Cable
Ground Connection
10. Cable
Power Supply
5.1 Power Supply
Power Input Module
100-240 VAC
Devices for Mains Operation
CON3
CON2
CON1
12. Cable
Ground Connection
10. Cable
Power Supply
5.2 DC/DC Converter
XLR3 Plug
15-28 VDC
Devices for Battery Operation
CON1
11. Stepper Motor
Transport of Material

No.	Part. No.	Description	PU	Serial-No.	
				from	to
1	9009113.001	Operator's Manual EOS1 de/en	1		
2	9009118.001	DVD EOS	1		

Further technical documents are available on the internet at www.cab.de in the menu “Support & Downloads”.

Tools

No.	Description	Type	Notes / Application	Figure
1	Torx screwdriver	TX10	replace printhead, adjust feed path of transfer ribbon	
2	Adjusting pliers flat-nosed, form A straight	135	dismount / mount of ground connections and springs	

Table 1 Tools

Test Equipment

No.	Description	Type	Notes / Application	Figure
3	Cylindrical dynamometer (cab Part No.:5909017) (spring scale) to use with cylinder test collar Pos. 4	0-5 N	adjusting the winding torques transfer ribbon supply hub 1,6 - 2 N	
4	Cylinder Test Collar (cab Part No.:5966016) approx. 1 m string with 30 N traction and not elastic) cab specific tools / test equipment		adjusting the winding torques transfer ribbon supply hub	

Table 2 Test Equipment

Auxiliary Materials

No.	Description	Type	Notes / Application	Figure
5	Grease (for plastic materials), cab Part No.: 5966224		grease plastic materials	

Table 3 Auxiliary Materials

Checking Braking Force

During printing operation the spring on the transfer ribbon supply hub functions as a brake. The braking force on the supply hub influences the transport of the transfer ribbon.

The braking force on the transfer ribbon supply hub is measured with a test collar.

The set values for the braking force at the test collar are:

Spring on	Direction of rotation	Braking Force
Transfer Ribbon Supply Hub	any direction	1,6 - 2,0 N

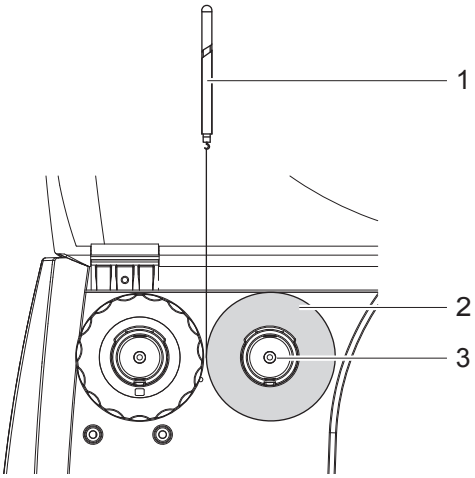


Fig. 1 Measure braking force on supply hub - outside wound transfer ribbon

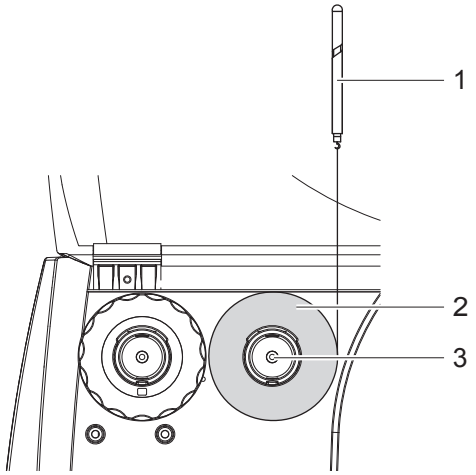


Fig. 2 Measure braking force on supply hub - inside wound transfer ribbon

1. Remove transfer ribbon from the printer.
2. Put test collar (2) on the supply hub (3).
3. Wind the cord around the test collar several times.
4. Secure spring scale (1) at the end of the cord.
5. Pull at the spring scale until the supply hub begins turning.
6. Allow the cord to unwind from the test collar at least one full turn and read the pulling force on the spring scale at the same time.
7. Compare the braking force with the set values.

Adjustments

The following adjustments are described in the Operator's Manual:

- Setting the feed path of the transfer ribbon

Danger!
Risk of death via electric shock!
▶ **Before opening the rear cover, disconnect the device from the mains supply and wait at least one minute until the power supply unit has discharged.**

Tear-off Plate / Cutter / Printhead / Print Roller

Replacement and mounting of these units are described in the ▷ Operator's Manual EOS.

Casing

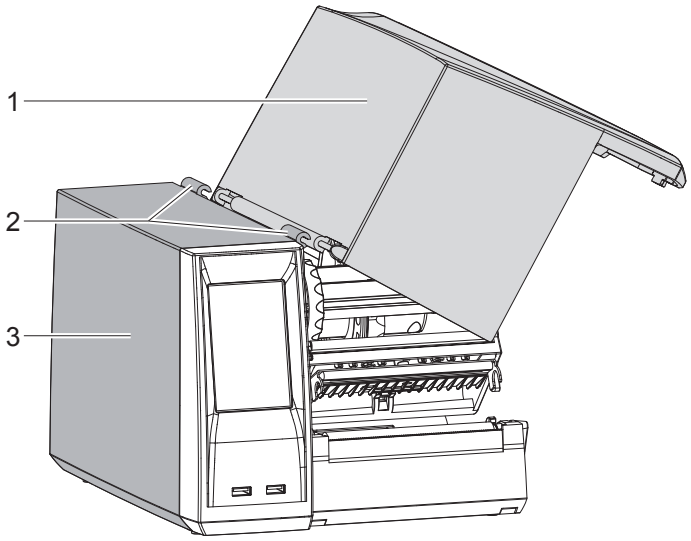


Fig. 3 Removing the cover

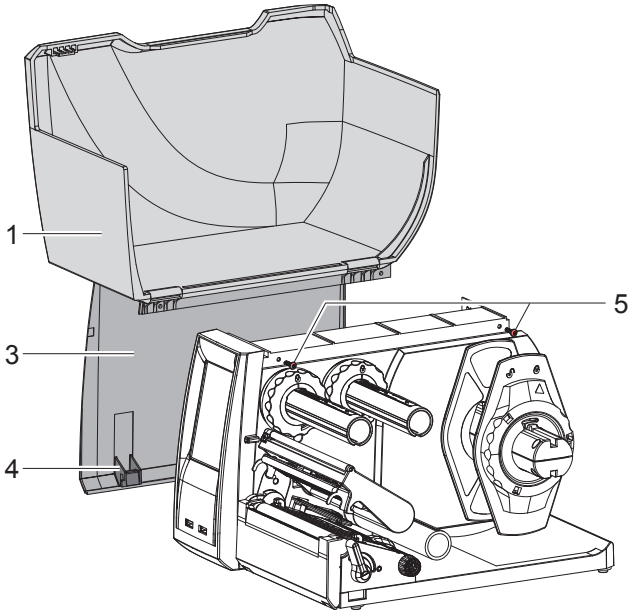


Fig. 4 Removing / mounting the casing

Removing the cover

▶ Lift the cover (1) by turning by 60°.
▶ Push the cover out of the hinges (2) of the cover plate (3) diagonally to the ground.

Notice!
For service work it is recommended to remove the casing consisting of cover (1) and cover plate (3) connectedly. It is not necessary to separate the cover from the cover plate.

Removing the casing

▶ Open the cover (1).
▶ Loosen 2 screws (5).
▶ Push the cover plate (3) with the cover (1) to the connector side.
▶ Lift the cover plate (3) with the cover (1) from the printer.

Mounting the casing

▶ Insert the hooks (4) into the slot of the bottom and push the casing to the control panel side.
▶ Fix the cover plate with 2 screws (5).

Control Panel

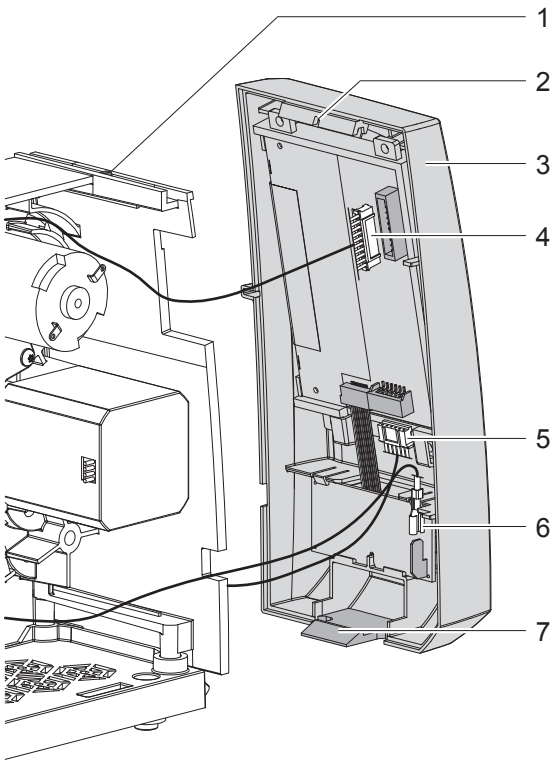


Fig. 5 Removing / mounting the control panel

Removing

- ▶ Remove the casing.
- ▶ Unlock the control panel (3) at the latch (7) swing it away from the printer and remove it by lifting.
- ▶ Unplug the connectors of the display cable (4), the cutter connection cable (5) and the ground connection cable (6).

Mounting

- ▶ Re-connect the cables (4 to 6).
- ▶ Hook the slot (2) of the cover into the guide (1) and press the control panel against the printer until the latch (7) clicks into place.
- ▶ Mount the casing.

Transport Module

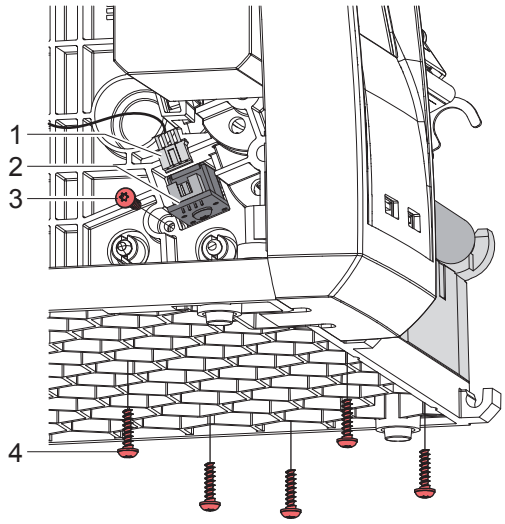


Fig. 6 Removing / mounting transport module 1

Removing

- ▶ Remove the tear-off plate/cutter.
- ▶ Remove the casing.
- ▶ Unplug the connector (1) of the label sensor (2).
- ▶ Move the label sensor as far as possible to the operator's side ▷ Operator's Manual.
- ▶ Remove screw (3) and 5 screws (4).

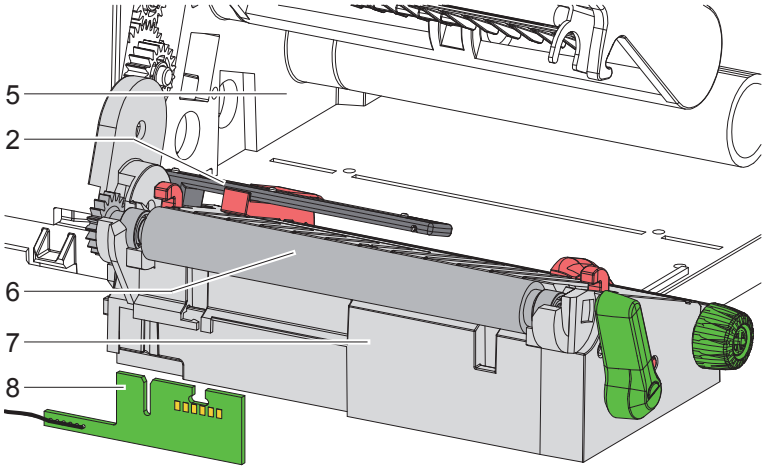


Fig. 7 Removing / mounting transport module 2

- ▶ If the printer is equipped with a cutter connection cable :
  - Remove control panel.
  - Unplug connector (5 / fig. 5) from the control panel.
- ▶ Remove the transport module (7) with the printing roller (6) by tilting from the chassis (5).
- ▶ Pull the cutter connection cable (8) downward out of the transport module (7).

Mounting

- ▶ Mount the assembly units in reverse order.

Stepper Motor

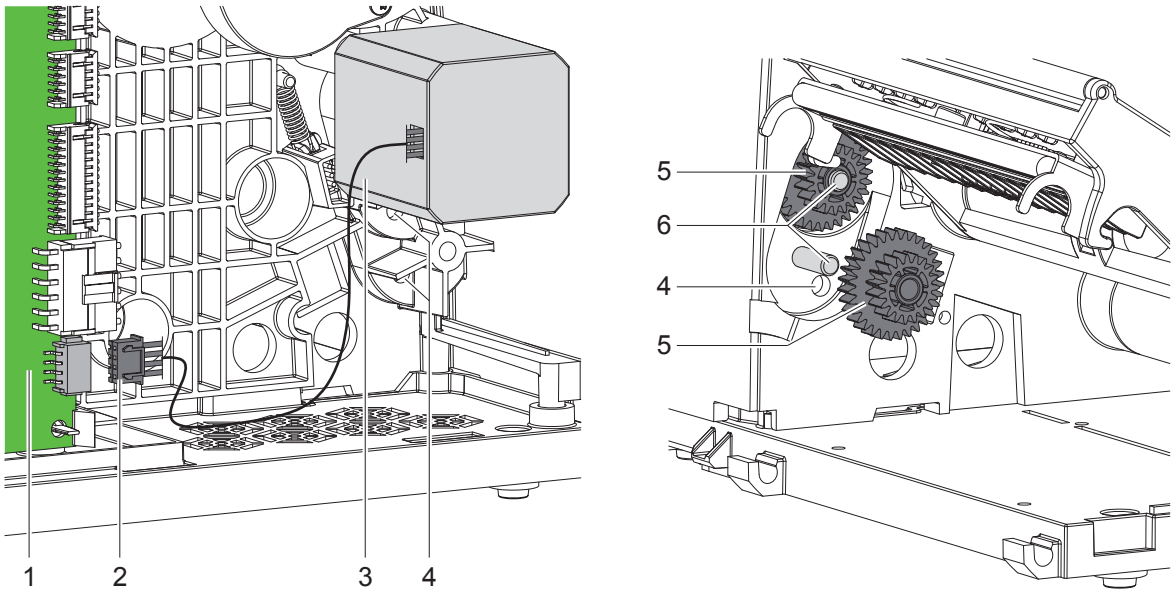


Fig. 8 Removing / mounting stepper motor 1

Removing

- ▶ Remove the casing
- ▶ Remove the transport module.
- ▶ Unplug the connector (2) of the stepper motor (3) from the CPU (1).
- ▶ Remove the gearwheels (5) from the axles (6).

Notice!

The gearwheels (5) are reachable from the inner side of the chassis through the holes (4) with a pointed tool and can be pushed that way from the axles.

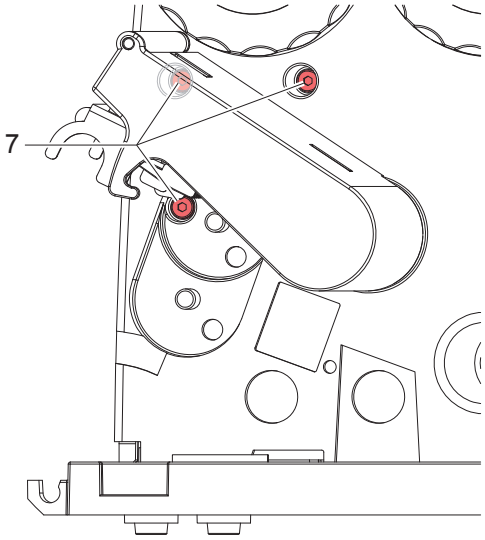


Fig. 9 Removing / mounting stepper motor 2

- ▶ Loosen 3 screws (7) and remove the stepper motor (3).

Mounting

- ▶ Mount the assembly units in reverse order.

Printhead Holder

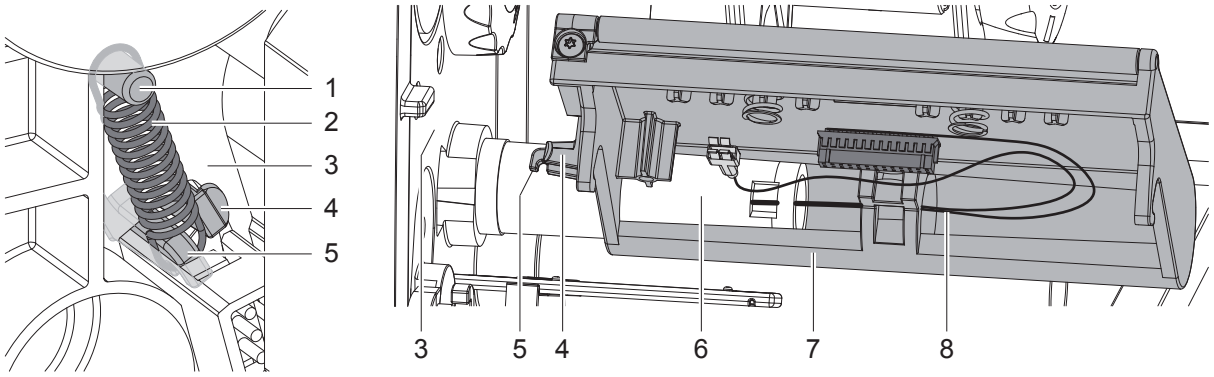


Fig. 10 Removing / mounting printhead holder

Removing

- ▶ Remove the casing.
- ▶ Remove the printhead.
- ▶ Remove the spring (2) from the spring bolt (1).
- ▶ Lift the printhead holder (7), unlock the latch (4) and push the printhead holder with the spring (2) to the operator's side out of the chassis (3).
- ▶ Remove the printhead holder (7) with the spring (2) completely from the retainer (6). In doing so remove the printhead cable (8) from the printhead holder.
- ▶ Keep the spring (2).

Mounting

- ▶ Push the printhead holder (7) onto the retainer (6). In doing so insert the printhead cable (8) into the printhead holder.
- ▶ Push latch (4) and spring hook (5) of the printhead holder through the gap of the chassis (3).

Notice!

For the following mounting of the spring (2) it is recommended to push the printhead holder in a position, where the latch (4) is clamped by the chassis but not completely locked yet.

- ▶ Mount the spring (2) onto the spring hook (5).
- ▶ Push the printhead holder (7) further until the latch (4) clicks into place.
- ▶ Mount the spring (2) onto spring bolt (1).
- ▶ Mount the printhead.
- ▶ Mount the casing.